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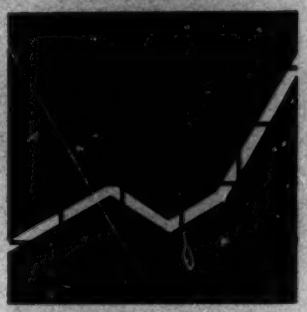

Colorado Business Review

BUSINESS RESEARCH DIVISION • GRADUATE SCHOOL OF BUSINESS ADMINISTRATION • UNIVERSITY OF COLORADO

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Volume LVI, Number 11, November 1983

So You Want to Attract High-Tech Firms

PART II

Clark E. Chastain

Clark E. Chastain is a professor of accounting at the University of Michigan–Flint.

WHAT DO HIGH-TECH FIRMS NEED AND WANT

Communities must also offer cultural events, stores, quality schools, theaters, churches, parks, and adequate meeting accommodations for groups. Professional employees usually expect and have alternative employment options that include a wide array of community support; a pleasant environment is also important. Austin Chamber of Commerce officials, seeking to convince the MCC Site Committee that the city's environment was favorable, took committee members about town to stress the mountains, trees, and lakes. The idea was to dispel the notion that Austin is a "typical" Texas location: flat with only sand and cactus in the landscape.

So far we have emphasized common needs of established high-technology firms. The needs of the entrepreneurial firm differ from those of the established firm. Professor David Brophy of the University of Michigan argues that the critical need of the beginning entrepreneur is venture capital[8]–high-risk capital needed to get a venture concern operating. He notes that Boston and the Silicon Valley areas have a great deal of venture capital readily available while Michigan, for example, does not, although at least seven venture capital firms now operate in the state and the Michigan Commerce Department has established a venture capital fund of $3 million for minority-owned firms.

Apparently many states offer some help with venture capital.[9] The Foundation for Science and Applied Research seeks venture funds for products developed through basic research at the University of Pittsburgh. In Germany, where only a handful of venture-capital firms are found and the banks shy away from providing risk capital to small companies, SM Software, a designer of computer programs, recently went public through the aid of a bank. Until now the scarcity of venture money has retarded the growth of high-technology companies in Germany, but public stock sales may alleviate the bottleneck.[10]

A favorable growth environment, says Brophy, is also mandatory to retain high-tech firms.[11] Such an environment includes (1) venture capital concerns; (2) banks, life insurance companies, pension funds and brokerage houses which will refer entrepreneurs to venture-capital concerns and support financing efforts; (3) service professionals, lawyers, accountants, financial advisors, and tax experts; and (4) individual funds channeled to growth firms. In what could be a step toward a comprehensive integrated plan, Brophy has organized a venture capital symposium to bring these groups, including national representatives, together to spur high-tech development in Michigan.

The Austin Chamber of Commerce offers this advice for retaining research-oriented firms: "(Give them) every possible assistance to expansion needs, and (help) trouble-shoot any expansion or other problems (zoning, utility needs, specialized employee skill recruitment, etc.)."[12]

WHAT CAN STATES AND COMMUNITIES DO TO ATTRACT HIGH-TECH FIRMS?

The race (some call it a war) for high-tech organizations is rapidly gaining momentum. Three states–Arizona, Florida, and Texas–may soon advance to among the front runners. Also, hit hard by the recession, midwestern states, especially those bordering on the Great Lakes, have much to gain from attracting technology pacesetters. So far, California, Massachusetts, New York and North Carolina, continue to lead in the relentless pursuit. Our study suggests that, in addition to the approach already described, an organization should take the following steps to gain high-tech concerns.

First, and perhaps most important, develop a multifaceted program with comprehensive coverage of universities, state offices, business groups, and research institutes. This program must be closely integrated and aggressively run. In some cases cooperation from labor unions may be necessary. The success of a multifold approach has been demonstrated by several states, by Japan, and by the Province of Ontario, and European countries are aware of the need for and are trying to develop a teamwork approach. The six Great Lakes states have signed a cooperative pact to encourage university-business cooperation. The recent cooperation among the Governor of Texas, the Austin Chamber of Commerce and other civic leaders, The University of Texas and Texas A and M in successfully winning the MCC consortium strongly supports the need for cooperative effort.

A regional metropolitan plan, not closely integrated into a statewide program, can also provide significant success. Using direct sales, advertising, promotion, public relations, research and sometimes special incentives, the city of San Diego has attracted about 250 electronics firms and 95 companies in health science and biomedical activities (synthetic vaccines, growth hormones, proteins, diagnostic reagents, pharmaceuticals and electronic medical systems). Research companies are located in the numerous research parks clustered around a scientific research zone and The University of California at San Diego, while the electronics concerns are widely scattered. Outstanding deep-water port facilities, the fact many people enjoy living in the San

[8] Brophy, *op. cit.*

[9] The U.S. Office of Technology Assessment lists 22 states as seriously pursuing high-tech firms, with California, Massachusetts, North Carolina, and New York the most aggressive. Report released May 24, 1983.

[10] "High Tech Tries an End Run Around Germany's Banks," *Business Week*, July 18, 1983.

[11] Brophy, *op. cit.*

[12] Survey, June 13, 1983, *op. cit.*

Diego area, and the possession of a group of strong universities have helped the city compete with other major metropolitan areas such as Phoenix, Tucson, Sacramento, Dallas, Houston, Atlanta, Austin, San Antonio, Colorado Springs and North Carolina's Research Triangle. Outside the sun belt, Seattle and Portland compete strongly for electronics/aerospace while Philadelphia, New England, the South, and selected midwestern states offer strong general competition.

San Diego's Economic Development Corporation (EDC) sees its program as limited in marketing the San Diego area as a site for high-technology because its local regional plan is not totally integrated into state efforts. Also it does not have proximity to strong retail and wholesale markets in addition to its population (greatly blocked by Los Angeles), and housing, plant sites and energy costs are high. In response to a survey, EDC officials commented about the use of special incentives, "We do not really know whether incentives are the way to go or not."[13]

Second, carefully inventory resources for supporting high-tech concerns. Thorough analysis of these data coupled with consideration of the needs and wishes of participants will suggest an action program. The state or community can begin its inventory using as a classification major criteria considered in locating companies: (1) labor (availability, cost and skills), (2) transportation, (3) proximity to markets, (4) business climate, (5) energy (availability and cost), (6) proximity to support services, (7) quality of life, (8) unionization, (9) taxes, (10) housing (availability and cost), (11) industrial property (availability and cost), (12) educational facilities, (13) cultural and social facilities, (14) capital availability, and (15) supporting professionals. Comprehensive data should be gathered for each criterion and an objective assessment should be made of advantages and disadvantages for each factor.

Third, match the inventory of resources available with the types and levels of high-tech firms they are able to support. For example, to concentrate on medical, pharmaceutical and biotechnical types of high-tech concerns, the region should have a number of research-oriented hospitals which have agreed to cooperative participation. Michigan, with its automotive manufacturing operations and a large number of existing computer firms, should stress retention and growth of the firms in the state, cooperation among them, and orientation of their work toward support of the automakers.

Fourth, establish, train and monitor,recruiting missions as part of the organized state-wide plan to write, phone, visit, educate, and persuade established high-technology firms in other states and in foreign countries to locate within the state's boundaries. Metropolitan areas, necessarily part of the state network, may want to follow similar independent recruiting steps.

The Office of Economic Development in Michigan describes some essential ingredients: "advertising and public relations campaigns, wheedling company officials, making deals, mediating company-community feuds and developing hard, factual, data for companies' use."[14] Officials continue, "It involves glitzy diplomacy . . . financial wheeling-dealing . . . marketing, surveys, building appraisals, advice and tours of cities and plant sites." It may even include "pleading with localities to fulfill promises higher officials may have made over cocktails without consulting local leaders."

Recruiting missions are really a specific aspect of the broader marketing function. San Diego's EDC illustrates the use of an aggressive marketing strategy which emphasizes advertising, direct sales, public relations, support programs and collateral materials. It targets geographic areas by priority for the current year. Then it directs advertising and marketing communications to top corporate officers and site selection specialists/industrial development consultants in these areas. It also advertises in a number of local, national, and foreign publications, such as *Fortune*, *Forbes*, *California Business*, *International Management (Europe)*, *Nikkei*, *Nikon Keizai*, and *U.S. Japan Business News*. An ad in *Fortune* in 1979 produced almost 17,000 responses, indicating the success of the advertising.

San Diego's EDC widely involves its membership in marketing operations. Executives of San Diego electronic and other high-technology firms send letters directly to their counterparts in companies located in New England and the Southwest, soliciting them to locate in San Diego. High quality, personalized (prospect) lists are critical for success. Staff and area executives visit Japan on trade missions. Executives who are members of the EDC are termed the Mayor's Task Force and are provided with "fact kits" to win over prospects when traveling. Top corporate officers in the Executives' Roundtable are asked to communicate the advantages of San Diego in interactions with clients. The EDC is also promoting a strong local-regional public relations program about economic development and business accomplishments.

Fifth, if business climate is a problem, work to place it in perspective and compensate for it. Emphasize positive features, such as a large pool of skilled and semi-skilled workers, immediate access to distribution networks, and a prestigious educational system. If high taxes are a problem seek to provide tax abatements and other financial incentives. If bureaucracy with intimidating red tape is scaring company executives away, seek to reduce the number of required forms and regulations.

Sixth, consider and make an effort to gain cooperation from strong labor unions. It is necessary to convince prospective entrepreneurs that they will receive cooperative support from unions in working toward their goals. The UAW blueprint for a new industrial policy, which recognizes the need for a policy supporting the high-tech sectors, indicates unions are willing to cooperate with high-tech firms. A proposed agency is a National Civilian Technology Administration, which would provide research and development assistance to firms in fields involving new technologies.

Seventh, find ways to augment risk capital available to firms for start-up, venture needs, and expansion and growth. Brophy claims that his annual symposium has helped in Michigan. Herbert Doan, former President of Dow Chemical, founded Doan Resources, which is one of the best known venture capital concerns in Michigan and brings its total number of these concerns to seven. States should seek to form and expand venture capital funds, and to

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[13] Received July 11, 1983.

[14] August Gribbin, "Michigan Works Harder to Attract New Business," *The Detroit News*, June 12, 1983, p. 1.

encourage a receptive attitude toward high-tech on the part of executives from banks, insurance companies and institutional lenders–to cooperate and help entrepreneurs and officials in new high-technology firms would be an important step forward.

Eighth, establish attractive research parks, such as North Carolina's Triangle, and locate them close to housing, cultural, and recreational facilities. Noted futurist Alvin Toffler, in his new book, ***Previews and Premises***, predicts that many employees will soon work in their homes with computer tie-ins. The location of suburban home developments near high-tech company concentrations or research parks will facilitate this social practice.

Ninth, support the expansion and growth needs of research-based concerns as strongly as their initial recruitment is supported.

Tenth, increase state appropriations for engineering, computer science and management schools and their research programs. Earmark a desired level of funds specifically for the advancement of high-technology activities. A five-year lead time is necessary to attract some research firms. To illustrate the need for the increased instructional purposes, the American Electronics Association in July this year predicted that the electronics and information technology industries will be short about 113,500 electrical and computer science engineers over the next five years.

One final point. It is clear that the competition for high-tech firms is fluid and rapidly changing. The needs of high-technology firms, and the needs of industries absorbing their advancements, are dynamic and will continue to be so for several years. Therefore, to successfully attract and retain new ventures potential hosts must continually revise their programs, expanding, augmenting the resources available, and providing incentives and other support.

To gain further general information and ideas on improving economic and high-tech development programs, officials should communicate with other state and major metropolitan centers for copies of their reports and promotional literature. A review of these individual programs will usually prove helpful.

SUMMARY AND CONCLUSIONS

High-tech firms–firms in drugs, electronics, information, telecommunications, robots, lasers, fiber optics, and genetic engineering–are the vanguard of industrial activity. The cutting-edge aspects of these industries, leading our nation in innovation, coupled with their earning of high profits and increased jobs, their spending, their nucleus effect on creating and attracting other similar operations, their lending of prestige to a region and their upgrading of social and cultural life, make them highly sought after by states and urban regions.

A primary need of high technology is advanced educational programs. University research must support the ventures' technical expertise and provide established supporting procedures for transferring university research findings to their use. Low cost of living and low-cost sites, a favorable business climate, an abundance of skilled labor, relatively low taxes and desirable living conditions near research parks or other central locations are primary requisites for attracting advanced-technology concerns. In some areas venture capital for new start-ups and expansion may be essential.

States and cities which wish to speed up their acquisition of research-based, high-technology firms should make an overall plan that includes government officials, universities and businesspersons. They should then inventory their resources and match these resources against appropriate high-tech firms they can best recruit and support. Recruiting teams of staff, businesspersons and other leaders are needed to study, target and persuade new firms to come to an area and persuade old concerns to remain. A host can compensate firms significantly for a negative business climate by granting financial incentives, especially where taxes and cost of living are high. A more cooperative relationship with aggressive unions will improve the business climate. Venture capital can be increased by establishing new venture capital firms and making more public funds available, and research parks and other locations for high-tech concerns should be established with easy close access to housing, cultural and other facilities needed by employees.

Continued support by state and private sector resources is necessary for expansion needs of high technology. Increased appropriations for university graduate and research programs in engineering, computer science and business should be made. Finally, even a carefully designed program must be aggressively implemented and updated frequently as the high-technology environment changes.

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COLORADO BUSINESS INDICATORS
(Figures in Thousands Unless Otherwise Indicated)

	July 1983	June 1983	July 1982	Percent Change July 1983 from June 1983	Percent Change July 1983 from July 1982
Total Civilian Labor Force (by place of residence)[a]	1,665.1	1,678.8	1,600.5	- 0.8	4.0
Unemployment	111.9	122.1	127.6	- 8.4	-12.3
Unemployment Rate (percent)	6.7	7.3	8.0	—	—
Employment	1,553.2	1,556.7	1,472.9	- 0.2	5.5
Nonagricultural Wage and Salary	1,502.9	1,509.7	1,422.0	- 0.5	5.7
Agricultural	50.3	47.0	50.9	7.0	- 1.2
Total Nonagricultural Wage and Salary Employment (by place of work)[a]	1,332.9	1,343.3	1,303.4	- 0.8	2.3
Mining	39.9	39.3	43.2	1.5	- 7.6
Metallic Minerals	5.9	6.0	8.1	- 1.7	-27.2
Bituminous Coal, Lignite, and Nonmetallic	4.6	4.6	5.3	0.0	-13.2
Oil and Gas Extraction	29.4	28.7	29.7	2.4	- 1.0
Contract Construction	88.3	86.4	82.4	2.2	7.2
Manufacturing	181.1	179.7	182.7	0.8	- 0.9
Lumber, Wood Products, and Furniture	7.1	6.8	6.5	4.4	9.2
Stone, Clay, Glass, and Concrete Products	9.7	9.7	10.7	0.0	- 9.4
Primary and Fabricated Metals	14.2	14.4	16.0	- 1.4	-11.3
Machinery, Except Electrical	25.6	25.0	25.8	2.4	- 0.8
Electric and Electronic Equipment	17.6	17.5	16.8	0.6	4.8
Transportation Equipment	13.6	13.7	14.4	- 0.7	- 5.6
Other Durable Goods	28.0	28.0	28.2	0.0	- 0.7
Food and Kindred Products	24.2	23.5	24.3	3.0	- 0.4
Textiles and Apparel	3.3	3.3	3.2	0.0	3.1
Paper and Allied Products	2.0	2.0	2.0	0.0	0.0
Printing and Publishing	19.0	19.0	18.5	0.0	2.7
Chemicals and Allied Products	7.9	7.9	7.6	0.0	4.0
Other Nondurable Goods	8.7	8.8	8.8	- 1.1	- 1.1
Finance, Insurance, and Real Estate	86.9	87.0	84.1	- 0.1	3.3
Banking	21.2	21.3	21.7	- 0.5	- 2.3
Credit Agencies Other than Banks	13.4	13.3	12.8	0.8	4.7
Insurance Carriers, Agents, and Brokers	20.6	20.6	20.3	0.0	1.5
Real Estate and Combination Offices	23.2	23.3	22.1	- 0.4	5.0
Other Finance, Insurance, and Real Estate	8.6	8.5	7.2	1.2	19.4
Transportation and Public Utilities	85.2	84.5	85.8	0.8	- 0.7
Railroad Transportation	5.7	5.5	6.1	3.6	- 6.6
Trucking and Warehousing	16.8	17.0	16.9	- 1.2	- 0.6
Air Transportation	15.4	15.0	14.2	2.7	8.5
Other Transportation	6.5	6.4	6.7	1.6	- 3.0
Communications, Electric, Gas, and Sanitary Services	40.9	40.5	42.0	1.0	- 2.6
Trade	329.1	330.3	321.5	- 0.4	2.4
Wholesale Trade	81.9	81.5	81.5	0.5	0.5
Retail Trade	247.1	248.8	240.0	- 0.7	3.0
Services	294.2	293.3	280.8	0.3	4.8
Lodging and Combination Lodging/Eating Places	28.2	26.6	26.1	6.0	8.1
Personal Services	15.0	15.1	14.1	- 0.7	6.4
Business Services	57.7	57.3	51.9	0.7	11.2
Auto and Miscellaneous Repair Services	14.6	14.6	14.1	0.0	3.6
Amusements and Recreation	21.0	20.8	19.4	1.0	8.3
Health Services	73.6	73.7	72.5	- 0.1	1.5
Educational Services	8.9	10.3	8.5	-13.6	4.7
Membership Organizations	20.4	20.4	20.3	0.0	0.5
Other Services	54.7	54.5	53.8	0.4	1.7
Government	228.2	242.7	223.0	- 6.0	2.3
Federal	53.6	53.5	51.8	0.2	3.5
State	49.9	51.3	49.4	- 2.7	1.0
Local	124.7	137.9	121.8	- 9.6	2.4

	July 1983	June 1983	July 1982	Percent Change July 1983 from June 1983	Percent Change July 1983 from July 1982
Average Weekly Hours					
Construction	39.4	38.5	38.1	2.3	3.4
Manufacturing	39.9	40.1	38.9	- 0.5	2.6
Durable Goods	40.1	40.6	39.3	- 1.2	2.0
Nondurable Goods	39.5	39.3	38.1	0.5	3.7
Average Weekly Earnings ($)					
Construction	527.17	509.74	502.16	3.4	5.0
Manufacturing	359.50	364.91	335.32	- 1.5	7.2
Durable Goods	364.51	373.11	345.05	- 2.3	5.6
Nondurable Goods	350.36	352.52	318.13	- 0.6	10.1
Initial Unemployment Claims (000)	14.1	16.0	19.6	-11.9	-28.1
Bankruptcies, All Types (number)	480	500	514	- 4.0	- 6.6
Total State Revenue ($000)	205,895	687,042	188,220	-70.0	9.4
Total State Expenditures ($000)	203,283	511,568	203,283	-60.3	0.0
Crude Oil Production (thous. bbls.)	2,485	2,321	2,600	7.1	- 4.4
Dry Gas Production (mil. cu. ft.)	8,602	7,310	12,499	17.7	-31.2
Coal Production	923.2	1,400.1	1,217.9	-34.1	-24.2
New Oil and Gas Wells (number)	152	144	159	5.6	- 4.4
Natural Gas Used (bil. cu. ft.)	5.6	6.7	6.5	-16.4	-13.9
Electrical Power Sales (mil. kwh)					
Residential	461.0*	474.7	436.3	- 2.9	5.7
Nonresidential	1,102.6*	992.1	1,128.3	11.1	- 2.3
New Construction, 122 places					
Residential permits (number)	2,903	3,401	1,842	-14.6	57.6
Residential value ($000)	190,956	217,065	114,079	-12.0	67.4
Nonresidential permits (number)	328	359	338	- 8.6	- 3.0
Nonresidential value ($000)	52,569	105,087	69,972	-50.0	-24.9
Highway Contractor Payments ($000)	11,616	10,929	14,822	6.3	-21.6
Savings and Loan Net New Savings ($000)[b]	112,200	-40,300	- 5,400	—	—
National Park Recreational Visits—10 Areas (000)[b]	1,204.8	863.4	1,120.7	39.5	7.5
Motor Vehicle Title Applications (000)	107.7	90.0	104.9	19.7	2.7
Highway Vehicle Traffic Counts at Border Stations (daily average)	56,673	49,039	57,643	15.6	- 1.7
Air Passengers, Stapleton (000)[c]	2,428	2,362	2,461	2.8	- 1.3
Air Freight and Air Express, Stapleton (thous. lbs.)	29,439	25,925	26,853	13.6	9.6
Prices Received by Farmers ($)					
Beef Cattle (per cwt)	61.90	64.40	64.20	- 3.9	- 3.6
Lambs (per cwt)	52.70	56.00	58.20	- 5.9	- 9.5
Wheat (per bu.)	3.12	3.36	3.26	- 7.1	- 4.3
Corn (per bu.)	3.30	3.35	2.70	- 1.5	22.2
Potatoes (per cwt)	—	4.25	7.00r	—	—
Wool (per lb.)	.48	.55	.60r	-12.7	-20.0

NOTES: An asterisk (*) indicates preliminary data subject to revision.
Revised data are marked (r).
n.r.—not reported.

[a] Employment figures have been updated to a December 1981 benchmark and are arranged by 1972 Standard Industrial Classifications (SIC). Previously reported data were on a March 1981 benchmark. Thus, these data are not comparable to that published prior.

[b] New series, thus figures are not comparable to those previously published.

[c] Includes scheduled airlines, commuter airlines, and charter passengers.

Employment, Hours, and Earnings data from Colorado Department of Labor and Employment.
Bankruptcies from the Office of the Federal Referee in Bankruptcy.
State Revenue and Expenditures from the State Controller's Office.
Crude Oil Production, Dry Gas Production and New Oil and Gas Wells from the Oil and Gas Conservation Commission.
Coal Production from Colorado State Coal Mine Inspection Department.
Natural Gas Used from Colorado Interstate Gas Company.
Electrical Power Sales from 17 individual companies.
New Construction from Bureau of the Census, U.S. Department of Commerce.
Highway Contractor Payments from the Colorado Highway Department.
Life Insurance Sales from the Life Insurance Marketing and Research Association, Inc.
Savings and Loan Net New Savings from Federal Home Loan Bank of Topeka.
Recreational Visits from National Park Service, Denver.
Highway Traffic counts from Colorado Highway Department.
Air Passengers, Freight, and Express from Stapleton International Airport Business Office.
Prices Received by Farmers from U.S. Department of Agriculture.

LOCAL BUSINESS CONDITIONS
(All Figures in Thousands)

	July 1983	June 1983	July 1982
ALAMOSA (1982 pop. 7,182)			
Electric Power (kwh)	2,681	3,656	2,452
Constr. ($)—Res.	60	0	0
—Nonres.	0	0	19
Deposits ($) (2 of 2 banks)	52,271	51,315	47,772
ARVADA (1982 pop. 91,262)			
Electric Power (kwh)	26,009	25,079	25,181
Constr. ($)—Res.	3,226	7,183	945
—Nonres.	4,871	849	0
Deposits ($) (4 of 5 banks)	109,215	107,802	87,267
ASPEN (1982 pop. 4,081)			
Electric Power (kwh)	2,616	n.a.	2,391
Constr. ($)—Res.	n.r.	500	310
—Nonres.	n.r.	1,865	0
Deposits ($) (2 of 3 banks)	76,868	78,295	77,819
AURORA (1982 pop. 178,665)			
Electric Power (kwh)	83,486	77,792	73,245
Constr. ($)—Res.	20,068	25,399	20,830
—Nonres.	1,495	4,066	874
Deposits ($) (10 of 14 banks)	278,937	264,099	203,195
BOULDER (1982 pop. 80,851)			
Electric Power (kwh)	57,560	51,959	51,624
Constr. ($)—Res.	3,901	4,460	370
—Nonres.	1,499	3,209	1,376
Deposits ($) (10 of 10 banks)	585,554	552,263	455,624
BRIGHTON (1982 pop. 13,239)			
Electric Power (kwh)	4,526	4,757	4,539
Constr. ($)—Res.	187	214	149
—Nonres.	0	129	0
Deposits ($) (2 of 2 banks)	63,196	59,048	55,158
BROOMFIELD (1982 pop. 22,452)			
Electric Power (kwh)	8,744	9,985	9,980
Constr. ($)—Res.	526	687	80
—Nonres.	1,371	5,017	271
Deposits ($) (2 of 2 banks)	60,811	60,211	50,867
CANON CITY (1982 pop. 13,576)			
Electric Power (kwh)	23,890	25,000	22,726
Constr. ($)—Res.	131	114	0
—Nonres.	0	0	34
Deposits ($) (3 of 3 banks)	108,657	108,121	101,210
COLORADO SPRINGS (1982 pop. 230,553)			
Electric Power (kwh)	162,267	153,704	154,701
Constr. ($)—Res.	23,301	31,358	12,298
—Nonres.	6,031	13,019	7,903
Deposits ($) (17 of 20 banks)	1,034,819	1,022,599	894,645
COMMERCE CITY (1982 pop. 16,412)			
Electric Power (kwh)	31,613	33,359	27,587
Constr. ($)—Res.	339	55	40
—Nonres.	340	100	5,382
Deposits ($) (1 of 1 bank)	26,355	26,800	25,354
CORTEZ (1982 pop. 7,489)			
Electric Power (kwh)	3,429	3,347	3,178
Constr. ($)—Res.	112	0	101
—Nonres.	0	215	27
Deposits ($) (3 of 3 banks)	93,148	91,448	78,217
CRAIG (1982 pop. 10,000)			
Electric Power (kwh)	3,697	4,015	4,681
Constr. ($)—Res.	0	88	0
—Nonres.	0	0	0
Deposits ($) (2 of 2 banks)	62,342	61,902	69,611

	July 1983	June 1983	July 1982
DENVER (1982 pop. 500,600)			
Electric Power (kwh)	348,066	318,801	324,882
Constr. ($)—Res.	19,671	15,857	4,906
—Nonres.	3,396	38,958	17,000
Deposits ($) (40 of 45 banks)	7,066,585	7,261,174	6,329,715
DURANGO (1982 pop. 12,276)			
Electric Power (kwh)	6,361	5,306	5,460
Constr. ($)—Res.	1,478	304	225
—Nonres.	90	200	4
Deposits ($) (3 of 3 banks)	134,381	129,527	116,527
ENGLEWOOD (1982 pop. 30,555)			
Electric Power (kwh)	21,805	20,109	20,298
Constr. ($)—Res.	210	472	189
—Nonres.	98	209	527
Deposits ($) (7 of 12 banks)	406,846	394,817	341,368
ESTES PARK (1982 pop. 2,934)			
Electric Power (kwh)	4,967	4,818	5,246
Constr. ($)—Res.	73	393	0
—Nonres.	211	136	14
Deposits ($) (2 of 2 banks)	42,774	40,802	36,511
FORT COLLINS (1982 pop. 68,307)			
Electric Power (kwh)	42,239	39,713	36,925
Constr. ($)—Res.	4,522	5,872	1,101
—Nonres.	1,906	2,170	1,802
Deposits ($) (8 of 8 banks)	399,619	415,591	346,073
FORT MORGAN (1982 pop. 8,913)			
Electric Power (kwh)	8,189	7,015	8,369
Constr. ($)—Res.	22	n.r.	0
—Nonres.	0	n.r.	0
Deposits ($) (3 of 3 banks)	96,562	96,362	88,388
GLENWOOD SPRINGS (1982 pop. 5,000)			
Electric Power (kwh)	5,053	4,889	4,785
Constr. ($)—Res.	0	120	180
—Nonres.	0	0	0
Deposits ($) (3 of 3 banks)	127,115	122,877	116,383
GOLDEN (1982 pop. 13,109)			
Electric Power (kwh)	5,728	5,487	3,869
Constr. ($)—Res.	644	1,902	156
—Nonres.	0	711	0
Deposits ($) (3 of 3 banks)	158,501	155,269	127,698
GRAND JUNCTION (1982 pop. 32,082)			
Electric Power (kwh)	20,713	18,671	19,243
Constr. ($)—Res.	320	250	208
—Nonres.	116	2,229	3,067
Deposits ($) (5 of 5 banks)	338,778	345,624	347,038
GREELEY (1982 pop. 54,063)			
Electric Power (kwh)	28,468	25,691	24,246
Constr. ($)—Res.	1,087	1,427	153
—Nonres.	2,172	61	313
Deposits ($) (9 of 9 banks)	488,870	478,495	416,686
GUNNISON (1982 pop. 6,031)			
Electric Power (kwh)	3,259	3,043	3,119
Constr. ($)—Res.	0	0	65
—Nonres.	0	36	636
Deposits ($) (2 of 2 banks)	48,489	47,776	43,392
LA JUNTA (1982 pop. 8,338)			
Electric Power (kwh)	5,680	4,670	5,309
Constr. ($)—Res.	0	0	62
—Nonres.	0	0	196
Deposits ($) (2 of 2 banks)	55,583	53,546	45,888

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LOCAL BUSINESS CONDITIONS—Continued

	July 1983	June 1983	July 1982
LAFAYETTE (1982 pop. 10,115)			
Electric Power (kwh)	2,637	2,558	2,297
Constr. ($)—Res.	857	641	324
—Nonres.	18	0	298
Deposits ($) (1 of 1 bank)	16,851	16,874	15,547
LAKEWOOD (1982 pop. 117,436)			
Electric Power (kwh)	57,386	59,594	52,170
Constr. ($)—Res.	3,845	7,283	8,947
—Nonres.	715	160	12,399
Deposits ($) (12 of 12 banks)	580,218	583,599	492,329
LAMAR (1982 pop. 7,793)			
Electric Power (kwh)	n.r.	5,280	6,846
Constr. ($)—Res.	84	153r	66
—Nonres.	38	55r	350
Deposits ($) (2 of 2 banks)	82,137	82,356	67,927
LITTLETON (1982 pop. 30,001)			
Electric Power (kwh)	16,879	15,896	13,709
Constr. ($)—Res.	3,853	3,934	1,821
—Nonres.	280	364	74
Deposits ($) (9 of 11 banks)	240,524	233,058	187,999
LONGMONT (1982 pop. 46,313)			
Electric Power (kwh)	22,806	21,512	17,791
Constr. ($)—Res.	2,719	3,770	2,359
—Nonres.	424	1,720	85
Deposits ($) (5 of 5 banks)	206,691	209,056	174,462
LOUISVILLE (1982 pop. 6,067)			
Electric Power (kwh)	9,859	10,061	9,434
Constr. ($)—Res.	5,846	6,417	1,947
—Nonres.	0	0	0
Deposits ($) (2 of 2 banks)	26,914	25,526	18,164
LOVELAND (1982 pop. 30,962)			
Electric Power (kwh)	22,208	20,105	17,596
Constr. ($)—Res.	3,219	1,638	636
—Nonres.	603	125	0
Deposits ($) (4 of 4 banks)	150,252	148,285	130,767
MONTROSE (1982 pop. 8,895)[b]			
Constr. ($)—Res.	318	197	139
—Nonres.	34	180	0
Deposits ($) (3 of 3 banks)	110,788	108,581	101,397
NORTHGLENN (1982 pop. 30,980)			
Electric Power (kwh)	10,897	9,924	9,547
Constr. ($)—Res.	0	0	999
—Nonres.	3,948	741	371
Deposits ($) (2 of 3 banks)	71,341	68,825	57,253
PUEBLO (1982 pop. 99,619)			
Electric Power (kwh)	51,403	45,876	49,573
Constr. ($)—Res.	493	435	102
—Nonres.	206	1,095	113
Deposits ($) (8 of 9 banks)	394,226	393,570	356,645
ROCKY FORD (1982 pop. 4,574)			
Electric Power (kwh)	5,928	4,853	5,514
Constr. ($)—Res.	0	0	97
—Nonres.	0	11	0
Deposits ($) (1 of 2 banks)	14,241	13,587	13,939
SALIDA (1982 pop. 4,478)			
Electric Power (kwh)	1,383	1,568	1,533
Constr. ($)—Res.	0	0	0
—Nonres.	0	0	0
Deposits ($) (2 of 2 banks)	40,461	43,634	42,870
STERLING (1982 pop. 11,470)			
Electric Power (kwh)	6,300	5,344	6,072
Constr. ($)—Res.	0	53	856
—Nonres.	0	771	0
Deposits ($) (3 of 3 banks)	143,524	146,019	134,232
THORNTON (1982 pop. 44,130)			
Electric Power (kwh)	15,907	15,856	15,248
Constr. ($)—Res.	2,460	2,642	877
—Nonres.	1,293	1,250	0
Deposits ($) (1 of 1 bank)	27,381	26,744	23,589
TRINIDAD (1982 pop. 9,900)			
Electric Power (kwh)	2,866	2,727	2,862
Constr. ($)—Res.	0	0	0
—Nonres.	0	0	0
Deposits ($) (2 of 2 banks)	57,137	55,880	52,891
WESTMINSTER (1982 pop. 54,995)			
Electric Power (kwh)	20,119	23,786	22,738
Constr. ($)—Res.	9,402	5,430	2,603
—Nonres.	500	4,200	1,045
Deposits ($) (3 of 3 banks)	100,717	98,993	85,117
WHEAT RIDGE (1982 pop. 31,743)			
Electric Power (kwh)	24,038	21,342	19,577
Constr. ($)—Res.	1,167	1,316	210
—Nonres.	273	3,832	0
Deposits ($) (2 of 2 banks)	90,917	91,697	71,081

[a] Regional figures.
[b] Electric Power consumption figures are not available.

NOTES: Population figures are preliminary 1982 estimates by the Demographic Section, Colorado Division of Local Government.
Construction figures are valuation of new residential and nonresidential construction only.
Deposit figures are total deposits in commercial banks as of last day of month.
n.r.—not reported
*—preliminary data
r—revised data